

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,747	08/29/2003	Arthur Gritzky	134366 (SPLG 1027)	1770
45436 DEAN D. SM <i>A</i>	7590 10/09/200	EXAMINER		
THE SMALL I	ATENT LAW GROU	CHENG, JACQUELINE		
611 OLIVE ST ST. LOUIS, M	REET, SUITE 1611	ART UNIT	PAPER NUMBER	
511 20 015, m	3 03.01	•	3768	
	,			
			MAIL DATE	DELIVERY MODE
		·	10/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



		Application No.		Applicant(s)						
		10/652,747		GRITZKY ET AL.	·					
Office Action Summary			Examiner		Art Unit					
			Jacqueline	•	3768	·				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).										
Status										
1)	1) Responsive to communication(s) filed on <u>5/21/07</u> .									
	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.									
· <u> </u>	,									
,	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.									
Dispositi	on of Claims		·							
4)🖂	4)⊠ Claim(s) <u>1-24</u> is/are pending in the application.									
	4a) Of the above claim(s) is/are withdrawn from consideration.									
	5) Claim(s) is/are allowed.									
6)⊠	☐ Claim(s) 1-24 is/are rejected.									
7)										
8)[	Claim(s) are subject to restriction	and/or	election red	quirement.						
Applicati	on Papers									
9) 🗌 .	The specification is objected to by the Ex	kaminer	r.							
	•			objected to by the E	xaminer.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).										
	Replacement drawing sheet(s) including the			· · · · · · · · · · · · · · · · · · ·	• •	FR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.										
Priority u	ınder 35 U.S.C. § 119									
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:										
	1. Certified copies of the priority documents have been received.									
	2. Certified copies of the priority documents have been received in Application No									
	3. Copies of the certified copies of the priority documents have been received in this National Stage									
	application from the International Bureau (PCT Rule 17.2(a)).									
* See the attached detailed Office action for a list of the certified copies not received.										
Attachment(s)										
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)										
	e of Draftsperson's Patent Drawing Review (PTO-9	Paper No(s)/Mail Date								
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:										

#### DETAILED ACTION

## Response to Arguments

1. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (US 2004/0165766 A1). Goto discloses a method for forming and displaying an image comprising acquiring a volume image, reconstructed from a plurality of sectional slice images, from a medical image system such as an ultrasonic system (paragraph 0002, 0009). Goto processes the volume data to form multiple enhanced images each being based upon anatomic features such as bone, soft tissue or blood vessels (paragraph 0093, 0103). Goto goes through a counting process counting the number of pixels of a certain darkness along a transverse plane. Although Goto does not explicitly disclose this plan be a C-plane, it would be obvious that it would be a C-plane depending on in what direction you are imaging the slices. The number stored relates to the thickness of the anatomic feature at that view line (paragraph 0039-0041). To process this data Goto volume-renderers the image based upon setting a weighting coefficient for each anatomic

Art Unit: 3768

feature. For example one of these coefficients can be a density value, such as a max density to render one of the images. As a different processing technique a min density can be used to render the image (paragraph 0053, 0090). Therefore to obtain each of the anatomic features requires a different threshold. The image could also be enhanced/rendered by the coefficient of the counting memories, which account for a depth/thickness of the organ of interest in the image portions. Any of the images that are created can be displayed simultaneously side by side (fig. 9A, paragraph 0104).

### Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 2004/0073112 A1 to Azuma and US 5,995,108 to Isobe.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline Cheng whose telephone number is 571-272-5596. The examiner can normally be reached on M-F 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/652,747 Page 4

Art Unit: 3768

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC

ENTRE L. CACLER

SUPERINSORY PATENT EXAMINER

SUPERINSORY CENERA 2700